

What is claimed is:

1. A method of haplotype determination in an individual for diagnostic or prognostic purposes, comprising determining a nucleotide from said nucleic acid which corresponds to the nucleotide occupying more than one Seq-40 polymorphic sites selected from the group consisting of the polymorphic sites at positions:
 - (1) 601 and 2106,
 - (2) 194 and 2106,
 - (3) 194 and 601,
 - (4) 1038 and 2106,
 - (5) 601, 1038 and 2106,
 - (6) 601, 1038 and 2185,
 - (7) 194, 1038 and 2106,
 - (8) 194, 601 and 1038,
 - (9) 194, 1038 and 2185,
 - (10) 601, 1038 and 2359,
 - (11) 194, 601 and 2106,
 - (12) 194, 601 and 1038,
 - (13) 601, 2106 and 2359,
 - (14) 601, 2106 and 2185,
 - (15) 601, 1038 and 2106,
 - (16) 601, 1038 and 2359,
 - (17) 194, 601 and 2106,
 - (18) 601, 1038, 2106 and 2185,
 - (19) 194, 601, 1038 and 2106,
 - (20) 194, 1038, 2106 and 2185,
 - (21) 194, 601, 1038 and 2185,
 - (22) 601, 1038, 2185 and 2359,
 - (23) 601, 1038, 2106 and 2359,
 - (24) 194, 1038, 2185 and 2359 and
 - (25) 194, 601, 1038 and 2359
 of SEQ ID NO: 1 on a single chromosome.

2. The method of claim 1, wherein the determining comprises determining the identity of the nucleotide at position 601 of SEQ ID NO:1 or a fragment thereof and determining the identity of the nucleotide at position 2106 of SEQ ID NO:1 or a fragment thereof.
- 5
3. The method of claim 1, wherein the determining comprises determining the identity of the nucleotide at position 194 of SEQ ID NO:1 or a fragment thereof and determining the identity of the nucleotide at position 2106 of SEQ ID NO:1 or a fragment thereof.
- 10
4. The method of claim 1, wherein the determining comprises determining the identity of the nucleotide at position 194 of SEQ ID NO:1 or a fragment thereof and determining the identity of the nucleotide at position 601 of SEQ ID NO:1 or a fragment thereof.
- 15
5. The method of claim 1, wherein the determining comprises determining the identity of the nucleotide at position 1038 of SEQ ID NO:1 or a fragment thereof and determining the identity of the nucleotide at position 2106 of SEQ ID NO:1 or a fragment thereof.
- 20
6. The method of claim 1, wherein the determining comprises determining the identity of the nucleotide at position 601 of SEQ ID NO:1 or a fragment thereof, determining the identity of the nucleotide at position 1038 of SEQ ID NO:1 or a fragment thereof and determining the identity of the nucleotide at position 2106 of SEQ ID NO:1 or a fragment thereof.
- 25
7. The method of claim 1, wherein the determining comprises determining the identity of the nucleotide at position 601 of SEQ ID NO:1 or a fragment thereof, determining the identity of the nucleotide at position 1038 of SEQ ID NO:1 or a fragment thereof and determining the identity of the nucleotide at position 2185 of SEQ ID NO:1 or a fragment thereof.
- 30

8. The method of claim 1, wherein the determining comprises determining the identity of the nucleotide at position 194 of SEQ ID NO:1 or a fragment thereof, determining the identity of the nucleotide at position 1038 of SEQ ID NO:1 or a fragment thereof and determining the identity of the nucleotide at position 2106 of SEQ ID NO:1 or a fragment thereof.
9. The method of claim 1, wherein the determining comprises determining the identity of the nucleotide at position 194 of SEQ ID NO:1 or a fragment thereof, determining the identity of the nucleotide at position 601 of SEQ ID NO:1 or a fragment thereof and determining the identity of the nucleotide at position 1038 of SEQ ID NO:1 or a fragment thereof.
10. The method of claim 1, wherein the determining comprises determining the identity of the nucleotide at position 194 of SEQ ID NO:1 or a fragment thereof, determining the identity of the nucleotide at position 1038 of SEQ ID NO:1 or a fragment thereof and determining the identity of the nucleotide at position 2185 of SEQ ID NO:1 or a fragment thereof.
11. The method of claim 1, wherein the determining comprises determining the identity of the nucleotide at position 601 of SEQ ID NO:1 or a fragment thereof, determining the identity of the nucleotide at position 1038 of SEQ ID NO:1 or a fragment thereof and determining the identity of the nucleotide at position 2359 of SEQ ID NO:1 or a fragment thereof.
12. The method of claim 1, wherein the determining comprises determining the identity of the nucleotide at position 194 of SEQ ID NO:1 or a fragment thereof, determining the identity of the nucleotide at position 601 of SEQ ID NO:1 or a fragment thereof and determining the identity of the nucleotide at position 2106 of SEQ ID NO:1 or a fragment thereof.
13. The method of claim 1, wherein the determining comprises determining the identity of the nucleotide at position 194 of SEQ ID NO:1 or a fragment thereof, determining the identity of the nucleotide at position 601 of SEQ ID NO:1 or a

fragment thereof and determining the identity of the nucleotide at position 1038 of SEQ ID NO:1 or a fragment thereof.

14. The method of claim 1, wherein the determining comprises determining the
5 identity of the nucleotide at position 601 of SEQ ID NO:1 or a fragment thereof, determining the identity of the nucleotide at position 2106 of SEQ ID NO:1 or a fragment thereof and determining the identity of the nucleotide at position 2359 of SEQ ID NO:1 or a fragment thereof.
- 10 15. The method of claim 1, wherein the determining comprises determining the identity of the nucleotide at position 601 of SEQ ID NO:1 or a fragment thereof, determining the identity of the nucleotide at position 2106 of SEQ ID NO:1 or a fragment thereof and determining the identity of the nucleotide at position 2185 of SEQ ID NO:1 or a fragment thereof.
- 15 16. The method of claim 1, wherein the determining comprises determining the identity of the nucleotide at position 601 of SEQ ID NO:1 or a fragment thereof, determining the identity of the nucleotide at position 1038 of SEQ ID NO:1 or a fragment thereof and determining the identity of the nucleotide at position 2106
20 of SEQ ID NO:1 or a fragment thereof.
17. The method of claim 1, wherein the determining comprises determining the identity of the nucleotide at position 601 of SEQ ID NO:1 or a fragment thereof, determining the identity of the nucleotide at position 1038 of SEQ ID NO:1 or a
25 fragment thereof and determining the identity of the nucleotide at position 2359 of SEQ ID NO:1 or a fragment thereof.
18. The method of claim 1, wherein the determining comprises determining the identity of the nucleotide at position 194 of SEQ ID NO:1 or a fragment thereof, determining the identity of the nucleotide at position 601 of SEQ ID NO:1 or a
30 fragment thereof and determining the identity of the nucleotide at position 2106 of SEQ ID NO:1 or a fragment thereof.

19. The method of claim 1, wherein the determining comprises determining the identity of the nucleotide at position 601 of SEQ ID NO:1 or a fragment thereof, determining the identity of the nucleotide at position 1038 of SEQ ID NO:1 or a fragment thereof, determining the identity of the nucleotide at position 2106 of SEQ ID NO:1 or a fragment thereof and determining the identity of the nucleotide at position 2185 of SEQ ID NO:1 or a fragment thereof.
20. The method of claim 1, wherein the determining comprises determining the identity of the nucleotide at position 194 of SEQ ID NO:1 or a fragment thereof, determining the identity of the nucleotide at position 601 of SEQ ID NO:1 or a fragment thereof, determining the identity of the nucleotide at position 1038 of SEQ ID NO:1 or a fragment thereof and determining the identity of the nucleotide at position 2106 of SEQ ID NO:1 or a fragment thereof.
21. The method of claim 1, wherein the determining comprises determining the identity of the nucleotide at position 194 of SEQ ID NO:1 or a fragment thereof, determining the identity of the nucleotide at position 1038 of SEQ ID NO:1 or a fragment thereof, determining the identity of the nucleotide at position 2106 of SEQ ID NO:1 or a fragment thereof and determining the identity of the nucleotide at position 2185 of SEQ ID NO:1 or a fragment thereof.
22. The method of claim 1, wherein the determining comprises determining the identity of the nucleotide at position 194 of SEQ ID NO:1 or a fragment thereof, determining the identity of the nucleotide at position 601 of SEQ ID NO:1 or a fragment thereof, determining the identity of the nucleotide at position 1038 of SEQ ID NO:1 or a fragment thereof and determining the identity of the nucleotide at position 2185 of SEQ ID NO:1 or a fragment thereof.
23. The method of claim 1, wherein the determining comprises determining the identity of the nucleotide at position 601 of SEQ ID NO:1 or a fragment thereof, determining the identity of the nucleotide at position 1038 of SEQ ID NO:1 or a fragment thereof, determining the identity of the nucleotide at position 2185 of

SEQ ID NO:1 or a fragment thereof and determining the identity of the nucleotide at position 2359 of SEQ ID NO:1 or a fragment thereof.

24. The method of claim 1, wherein the determining comprises determining the identity of the nucleotide at position 601 of SEQ ID NO:1 or a fragment thereof, determining the identity of the nucleotide at position 1038 of SEQ ID NO:1 or a fragment thereof, determining the identity of the nucleotide at position 2106 of SEQ ID NO:1 or a fragment thereof and determining the identity of the nucleotide at position 2359 of SEQ ID NO:1 or a fragment thereof.
25. The method of claim 1, wherein the determining comprises determining the identity of the nucleotide at position 194 of SEQ ID NO:1 or a fragment thereof, determining the identity of the nucleotide at position 1038 of SEQ ID NO:1 or a fragment thereof, determining the identity of the nucleotide at position 2185 of SEQ ID NO:1 or a fragment thereof and determining the identity of the nucleotide at position 2359 of SEQ ID NO:1 or a fragment thereof.
26. The method of claim 1, wherein the determining comprises determining the identity of the nucleotide at position 194 of SEQ ID NO:1 or a fragment thereof, determining the identity of the nucleotide at position 601 of SEQ ID NO:1 or a fragment thereof, determining the identity of the nucleotide at position 1038 of SEQ ID NO:1 or a fragment thereof and determining the identity of the nucleotide at position 2359 of SEQ ID NO:1 or a fragment thereof.
27. The method of claim 1, wherein the determining comprises amplification of the DNA.
28. The method of claim 1 wherein the determining comprises multiple PCR amplification of specific alleles.
29. A method of evaluating the propensity of a patient to develop schizophrenia comprising:

determining a nucleotide from a nucleic acid obtained from said patient which corresponds to the nucleotide occupying one or more Seq-40 polymorphic sites at positions

- 1) 601 and 1038,
- 5 (2) 194 and 1038,
- (3) 601 and 2106,
- (4) 194 and 2106,
- (5) 194 and 601,
- (6) 1038 and 2106,
- 10 (7) 601, 1038 and 2106,
- (8) 601, 1038 and 2185,
- (9) 194, 1038 and 2106,
- (10) 194, 601 and 1038,
- (11) 194, 1038 and 2185,
- 15 (12) 601, 1038 and 2359,
- (13) 194, 601 and 2106,
- (14) 194, 601 and 1038,
- (15) 601, 2106 and 2359,
- (16) 601, 2106 and 2185,
- 20 (17) 601, 1038 and 2106,
- (18) 601, 1038 and 2359,
- (19) 194, 601 and 2106,
- (20) 601, 1038, 2106 and 2185,
- (21) 194, 601, 1038 and 2106,
- 25 (22) 194, 1038, 2106 and 2185,
- (23) 194, 601, 1038 and 2185,
- (24) 601, 1038, 2185 and 2359,
- (25) 601, 1038, 2106 and 2359,
- (26) 194, 1038, 2185 and 2359 and
- 30 (27) 194, 601, 1038 and 2359

of SEQ ID NO: 1 on a single chromosome, and evaluating whether the patient has a propensity to develop schizophrenia.

30. The method of claim 29, wherein the evaluation step comprises determining that the patient has a propensity to develop schizophrenia if the identity of the nucleotide at position 601 of SEQ ID NO:1 or a fragment thereof is a G and if the identity of the nucleotide at position 1038 of SEQ ID NO:1 or a fragment thereof is a C.
31. The method of claim 29, wherein the evaluation step comprises determining that the patient has a propensity to develop schizophrenia if the identity of the nucleotide at position 194 of SEQ ID NO:1 or a fragment thereof is an A and if the identity of the nucleotide at position 1038 of SEQ ID NO:1 or a fragment thereof is a C.
32. The method of claim 29, wherein the evaluation step comprises determining that the patient has a propensity to develop schizophrenia if the identity of the nucleotide at position 601 of SEQ ID NO:1 or a fragment thereof is a G and if the identity of the nucleotide at position 2106 of SEQ ID NO:1 or a fragment thereof is a G.
33. The method of claim 29, wherein the evaluation step comprises determining that the patient has a propensity to develop schizophrenia if the identity of the nucleotide at position 194 of SEQ ID NO:1 or a fragment thereof is an A and if the identity of the nucleotide at position 2106 of SEQ ID NO:1 or a fragment thereof is a G.
34. The method of claim 29, wherein the evaluation step comprises determining that the patient has a propensity to develop schizophrenia if the identity of the nucleotide at position 194 of SEQ ID NO:1 or a fragment thereof is a G and if the identity of the nucleotide at position 601 of SEQ ID NO:1 or a fragment thereof is a G.
35. The method of claim 29, wherein the evaluation step comprises determining that the patient has less of a propensity to develop schizophrenia if the identity of the nucleotide at position 1038 of SEQ ID NO:1 or a fragment thereof is a G and if

the identity of the nucleotide at position 2106 of SEQ ID NO:1 or a fragment thereof is an A.

- 5 36. The method of claim 29, wherein the evaluation step comprises determining that the patient has less of a propensity to develop schizophrenia if the identity of the nucleotide at position 601 of SEQ ID NO:1 or a fragment thereof is a G, if the identity of the nucleotide at position 1038 of SEQ ID NO:1 or a fragment thereof is a C and if the identity of the nucleotide at position 2106 of SEQ ID NO:1 or a fragment thereof is a G.
- 10 37. The method of claim 29, wherein the evaluation step comprises determining that the patient has a propensity to develop schizophrenia if the identity of the nucleotide at position 601 of SEQ ID NO:1 or a fragment thereof is a G, if the identity of the nucleotide at position 1038 of SEQ ID NO:1 or a fragment thereof is a C and if the identity of the nucleotide at position 2185 of SEQ ID NO:1 or a fragment thereof is a G.
- 15 38. The method of claim 29, wherein the evaluation step comprises determining that the patient has less of a propensity to develop schizophrenia if the identity of the nucleotide at position 194 of SEQ ID NO:1 or a fragment thereof is an A, if the identity of the nucleotide at position 1038 of SEQ ID NO:1 or a fragment thereof is a C and if the identity of the nucleotide at position 2106 of SEQ ID NO:1 or a fragment thereof is a G.
- 20 39. The method of claim 29, wherein the evaluation step comprises determining that the patient has a propensity to develop schizophrenia if the identity of the nucleotide at position 194 of SEQ ID NO:1 or a fragment thereof is a A, if the identity of the nucleotide at position 601 of SEQ ID NO:1 or a fragment thereof is a G and if the identity of the nucleotide at position 1038 of SEQ ID NO:1 or a fragment thereof is a C
- 25 40. The method of claim 29, wherein the evaluation step comprises determining that the patient has a propensity to develop schizophrenia if the identity of the
- 30

nucleotide at position 194 of SEQ ID NO:1 or a fragment thereof is an A, if the identity of the nucleotide at position 1038 of SEQ ID NO:1 or a fragment thereof is a C or G and if the identity of the nucleotide at position 2185 of SEQ ID NO:1 or a fragment thereof is a G or A.

5

41. The method of claim 29, wherein the evaluation step comprises determining that the patient has a propensity to develop schizophrenia if the identity of the nucleotide at position 601 of SEQ ID NO:1 or a fragment thereof is a G, if the identity of the nucleotide at position 1038 of SEQ ID NO:1 or a fragment thereof is a C and if the identity of the nucleotide at position 2359 of SEQ ID NO:1 or a fragment thereof is a G.

42. The method of claim 29, wherein the evaluation step comprises determining that the patient has a propensity to develop schizophrenia if the identity of the nucleotide at position 194 of SEQ ID NO:1 or a fragment thereof is an A, if the identity of the nucleotide at position 601 of SEQ ID NO:1 or a fragment thereof is a G and if the identity of the nucleotide at position 2106 of SEQ ID NO:1 or a fragment thereof is an A.

43. The method of claim 29, wherein the evaluation step comprises determining that the patient has a propensity to develop schizophrenia if the identity of the nucleotide at position 194 of SEQ ID NO:1 or a fragment thereof is a G, if the identity of the nucleotide at position 601 of SEQ ID NO:1 or a fragment thereof is a G and if the identity of the nucleotide at position 1038 of SEQ ID NO:1 or a fragment thereof is a C.

44. The method of claim 29, wherein the evaluation step comprises determining that the patient has a propensity to develop schizophrenia if the identity of the nucleotide at position 601 of SEQ ID NO:1 or a fragment thereof is a G, if the identity of the nucleotide at position 2106 of SEQ ID NO:1 or a fragment thereof is a G and if the identity of the nucleotide at position 2359 of SEQ ID NO:1 or a fragment thereof is a G.

45. The method of claim 29, wherein the evaluation step comprises determining that the patient has a propensity to develop schizophrenia if the identity of the nucleotide at position 601 of SEQ ID NO:1 or a fragment thereof is a G, if the identity of the nucleotide at position 2106 of SEQ ID NO:1 or a fragment thereof is a G and if the identity of the nucleotide at position 2185 of SEQ ID NO:1 or a fragment thereof is a G.
46. The method of claim 29, wherein the evaluation step comprises determining that the patient has a propensity to develop schizophrenia if the identity of the nucleotide at position 601 of SEQ ID NO:1 or a fragment thereof is a G, if the identity of the nucleotide at position 1038 of SEQ ID NO:1 or a fragment thereof is an A and if the identity of the nucleotide at position 2106 of SEQ ID NO:1 or a fragment thereof is an A.
47. The method of claim 29, wherein the evaluation step comprises determining that the patient has a propensity to develop schizophrenia if the identity of the nucleotide at position 601 of SEQ ID NO:1 or a fragment thereof is a G, if the identity of the nucleotide at position 1038 of SEQ ID NO:1 or a fragment thereof is a C and if the identity of the nucleotide at position 2359 of SEQ ID NO:1 or a fragment thereof is a T.
48. The method of claim 29, wherein the evaluation step comprises determining that the patient has less of a propensity to develop schizophrenia if the identity of the nucleotide at position 194 of SEQ ID NO:1 or a fragment thereof is an A, if the identity of the nucleotide at position 601 of SEQ ID NO:1 or a fragment thereof is a G and if the identity of the nucleotide at position 2106 of SEQ ID NO:1 or a fragment thereof is a G.
49. The method of claim 29, wherein the evaluation step comprises determining that the patient has a propensity to develop schizophrenia if the identity of the nucleotide at position 601 of SEQ ID NO:1 or a fragment thereof is a G, if the identity of the nucleotide at position 1038 of SEQ ID NO:1 or a fragment thereof is a C, if the identity of the nucleotide at position 2106 of SEQ ID NO:1 or a

fragment thereof is a G if the identity of the nucleotide at position 2185 of SEQ ID NO:1 or a fragment thereof is a G.

50. The method of claim 29, wherein the evaluation step comprises determining that
5 the patient has less of a propensity to develop schizophrenia if the identity of the nucleotide at position 194 of SEQ ID NO:1 or a fragment thereof is an A, if the identity of the nucleotide at position 601 of SEQ ID NO:1 or a fragment thereof is a G, if the identity of the nucleotide at position 1038 of SEQ ID NO:1 or a
10 fragment thereof is a C and if the identity of the nucleotide at position 2106 of SEQ ID NO:1 or a fragment thereof is a G.
51. The method of claim 29, wherein the evaluation step comprises determining that
the patient has a propensity to develop schizophrenia if the identity of the nucleotide at position 194 of SEQ ID NO:1 or a fragment thereof is an A, if the
15 identity of the nucleotide at position 1038 of SEQ ID NO:1 or a fragment thereof is a C, if the identity of the nucleotide at position 2106 of SEQ ID NO:1 or a fragment thereof is a G and if the identity of the nucleotide at position 2185 of SEQ ID NO:1 or a fragment thereof is a G.
- 20 52. The method of claim 29, wherein the evaluation step comprises determining that the patient has a propensity to develop schizophrenia if the identity of the nucleotide at position 194 of SEQ ID NO:1 or a fragment thereof is an A, if the identity of the nucleotide at position 601 of SEQ ID NO:1 or a fragment thereof is a G, if the identity of the nucleotide at position 1038 of SEQ ID NO:1 or a
25 fragment thereof is a C and if the identity of the nucleotide at position 2185 of SEQ ID NO:1 or a fragment thereof is a G.
53. The method of claim 29, wherein the evaluation step comprises determining that
30 the patient has a propensity to develop schizophrenia if the identity of the nucleotide at position 601 of SEQ ID NO:1 or a fragment thereof is a G, if the identity of the nucleotide at position 1038 of SEQ ID NO:1 or a fragment thereof is a C, if the identity of the nucleotide at position 2185 of SEQ ID NO:1 or a

fragment thereof is a G and if the identity of the nucleotide at position 2359 of SEQ ID NO:1 or a fragment thereof is a T.

54. The method of claim 29, wherein the evaluation step comprises determining that
5 the patient has a propensity to develop schizophrenia if the identity of the
nucleotide at position 601 of SEQ ID NO:1 or a fragment thereof is a G, if the
identity of the nucleotide at position 1038 of SEQ ID NO:1 or a fragment thereof
is a C, if the identity of the nucleotide at position 2106 of SEQ ID NO:1 or a
fragment thereof is a G and if the identity of the nucleotide at position 2359 of
10 SEQ ID NO:1 or a fragment thereof is a T or G.
55. The method of claim 29, wherein the evaluation step comprises determining that
the patient has a propensity to develop schizophrenia if the identity of the
nucleotide at position 194 of SEQ ID NO:1 or a fragment thereof is an A, if the
15 identity of the nucleotide at position 1038 of SEQ ID NO:1 or a fragment thereof
is a C, if the identity of the nucleotide at position 2185 of SEQ ID NO:1 or a
fragment thereof is a G and if the identity of the nucleotide at position 2359 of
SEQ ID NO:1 or a fragment thereof is a T.
- 20 56. The method of claim 29, wherein the evaluation step comprises determining that
the patient has a propensity to develop schizophrenia if the identity of the
nucleotide at position 194 of SEQ ID NO:1 or a fragment thereof is an A, if the
identity of the nucleotide at position 601 of SEQ ID NO:1 or a fragment thereof
is a G, if the identity of the nucleotide at position 1038 of SEQ ID NO:1 or a
25 fragment thereof is a C and if the identity of the nucleotide at position 2359 of
SEQ ID NO:1 or a fragment thereof is a G.